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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,986	12/21/1999	AKIHIKO NAKAZAWA	35.C14120	3093
5514	7590	03/22/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			FERGUSON, LAWRENCE D	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/467,986	NAKAZAWA ET AL.	
	Examiner	Art Unit	
	Lawrence D Ferguson	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/18/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,10-13 and 30-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,10-13 and 30-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed December 18, 2003.
Claim 1 was amended and claims 31-34 were added, rendering claims 1-3, 5, 10-13 and 30-34 pending.

Claim Rejections – 35 USC 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 31-34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In instant claims 5 and 31-34 Applicant claims features of a circular die used. These claims are indefinite because independent claim 1 no longer consists of a circular die. It is unclear how to determine the thickness of the endless belt when there is no slit width or external diameter of a circular die present in the independent claims.

Claim Rejections – 35 USC 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 10-13 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sypula et al. (U.S. 5,525,446).

Sypula discloses an intermediate transfer member for an electrostatographic imaging system (column 2, lines 10-12) where a toner image is formed on an image forming device and transferred to the intermediate transfer member and then a receiving substrate (photosensitive member) (column 2, lines 24-31). Sypula discloses the member can be in the form of an endless belt (column 2, lines 55-56) where polycarbonate resins employed as the bottom layer of the intermediate transfer member (column 2, lines 62-63) including 4,4'-dihydroxy-diphenyl-sulphone and the like (column 3, lines 14-15) which comprise conductive materials (column 3, lines 60-65). Sypula discloses a resistivity about 10^{10} ohm-cm (column 6, lines 21-22) and a surface resistivity of the film base layer of intermediate transfer member is greater than 10^7 ohms/square (column 15, lines 8-10). Sypula discloses the intermediate transfer member has a thickness of about 200 μ m (column 16, line 5). Sypula discloses an extrusion process where a die tool is prepared from metal hardware with an extrusion slot that has the width and thickness dimensions of the film (column 4, lines 33-36). Sypula discloses the polycarbonate plastic compound is extruded through the die tool after being melted (column 4, lines 40-41). In claim 1, the phrase, 'for use in an electrophotographic apparatus' is an intended use, which is given little patentable weight.

Additionally, the claim language, 'transferred by applying a first transfer bias and from which the toner image is transferred to an image-receiving material by applying a second transfer bias' introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Additionally, in instant amended claim 30, the phrase 'means for transferring a toner image formed on the photosensitive member to the endless belt under an application of a first transfer bias...to an image-receiving material under an application of a second transfer bias' also introduces a process limitation to the product claim, which is given little patentable weight in a product claim. Sypula does not disclose an external diameter. However, the diameter of the belt is of a conventional value and determination of the diameter is considered optimizable. It would have been obvious to one of ordinary skill in the art to make claimed invention because Sypula teaches an endless belt made of the same materials as applicant claims.

Response to Arguments

6. Applicant's arguments to 35 USC 103(a) being unpatentable over Sypula et al. (U.S. 5,525,446) have been considered but are unpersuasive. Applicant argues Sypula does not disclose an intermediate transfer member having a single layer structure as

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presently claimed. It would have been obvious to one of ordinary skill in the art to separate the endless belt in Sypula into a single layer because constructing a formerly integral structure in various elements involves routine skill in the art. See *Nerwin v. Erlichman*, 168 USPQ 177, 179. Furthermore, Applicant teaches changing the endless belt from a single-layer belt to a triple or more layer belts by adding additional extruders on page 15, line 26 through page 16, line 10. Applicant further argues Mitsubishi cannot provide the teachings missing in Sypula. Mitsubishi has been withdrawn because Applicant no longer has a circular die in independent claim 1, which indefinite claims 5 and 31-34 depend upon.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA M. KELLY
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